

# Time Domain Reflectometer

## TDR 1170

■ **Hipotronics TDR1170** — The unique features and new technology used in the TDR 1170 make it the most flexible and easiest to use instrument available for advanced cable fault location. The TDR 1170 features an automatic configuration, which can be modified as necessary. All cable fault data can be stored and retrieved at any time, ensuring time savings, consistency and accuracy from one crew to the next.

The digital TDR 1170 will locate and identify short circuit (bolted) faults, low resistance shunt faults, open circuits, high resistance series faults, wet sections, splices, transformers, cable transitions, and concentric neutral corrosion. To locate high resistance, intermittent and flashover faults, the TDR 1170 is designed to measure in the digital arc reflection, current impulse, voltage decay, and all differential fault locating modes. The selection of fault location method allows the operator to select the method which they are most familiar with or the method that is most appropriate for the type of cable and type of fault that is encountered.

The TDR 1170 requires a high voltage coupler to interface to a cable fault locator (thumper). The cable fault locator then provides the voltage and current to enable the TDR 1170 to quickly and definitively locate cable faults.

Included with the TDR 1170 is a software package to allow the stored data to be viewed on a PC and also be printed and analyzed by office personnel or training teams.



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### Features

- ☑ **Digital High Voltage TDR**
- ☑ **5 Methods of Fault Location**
  - ☑ **Arc Reflection**
  - ☑ **Impulse Current**
  - ☑ **Voltage Decay**
  - ☑ **Differential Methods**
  - ☑ **Low Voltage**
- ☑ **Color LCD Screen**
- ☑ **PC Software**
- ☑ **SVGA Output** for External Monitor

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### Benefits

- Pre-Locate Faults**
- Diagnose Cable Faults**
- Easy to Use**
- Compatible with** Common “Thumpers”
- Provides Long-Term** Storage and Evaluation
- Cable System** Signature Mapping
- Reduce Outage** Time
- Reduce Cable** Damage
- Simplified Operator** Training

## Technical Specifications

### General

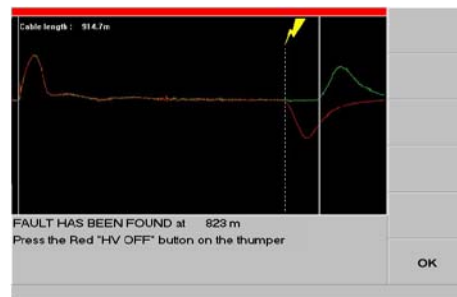
Input Voltage:	90 to 250 V AC, 50/60Hz	VP Range:	98ft./μs to 492ft./μs
Accuracy:	< ± 1% of cable length	Pulse Amplitude:	25 V into 50W
Measuring Range:	1 ft. to 160,000 ft.	Pulse Width:	50ns to 10μs
Units of Measure:	Feet, Yards, Meters	Sample Rate:	12.5 to 30ms
Trigger Delay:	1 to 30ms	Memory Modes:	32 sets of 1 or 3 phase
Setup:	16 setup options	RS232 Port:	Download traces to PC
Monitor: LCD Display 10 inch diag.			

### Weights and Dimensions (W x H x D, net weight, ship weight)

Standard 19" rack	19" x 10.5" x 7" (48 x 26 x 18 cm)	18 lbs (8.2 kg)	lbs (kg)
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### Scope of Supply

- Qty.1 TDR1170 in standard 19" rack mount cabinet
- Qty.4 RG58/U BNC-BNC cable
- Qty.1 Serial interface cable and input line cord
- Qty.1 Operations Manual and TDR-PC interface software



### Ordering Information

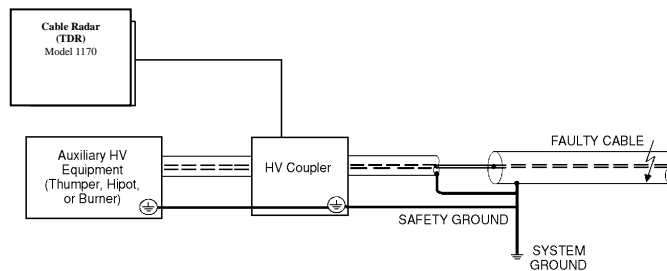
#### System

Time Domain Reflectometer	<b>TDR1170-A</b>
	<b>TDR1170-B</b>

#### Accessories

HV Coupler	<b>HVC4100 series</b>
Cable Fault Locating (Thumper)	<b>CF or CET series</b>
Cable Reels	<b>8100</b>
Accessory Connectors	

### Measuring Setup Diagram



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